

CLAIMS

1. A semiconductor sensor comprising:
 - a substrate;
 - a membrane which is a thin part formed on
 - 5 a top surface of the substrate; and
 - a thick portion which is formed in a
 - portion excluding the thin portion from the substrate;
 - wherein
 - a hollow part is formed under the membrane
 - 10 by bonding a bottom of the substrate and a mounting
 - surface on which the semiconductor sensor is mounted;
 - a pressure difference adjusting means is
 - provided for eliminating difference in pressure of a
 - fluid between an inside and an outside of the hollow part
 - 15 while the sensor is in use; and
 - the pressure difference adjusting means is
 - at least a relief hole for the expansion or contraction
 - of a fluid within the hollow part.
2. A semiconductor sensor, as set forth in claim
- 20 1, wherein the membrane is provided with the at least a
- relief hole for the expansion or contraction.
3. A semiconductor sensor, as set forth in claim
- 1, wherein the at least a relief hole for the expansion
- or contraction is provided by etching the membrane.
- 25 4. A semiconductor sensor, as set forth in claim
- 1, wherein it is any one of an infrared-ray sensor, a gas
- sensor, an air fuel ratio sensor, a pressure sensor and
- an acceleration sensor.